C4I Support Plan Overview

17-Dec-02

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The C4I Support Plan

… identifies C4ISR needs, dependencies, and interfaces for programs in all acquisition categories (ACAT ID, IC, IAM, IAC, II, and III), focusing attention on interoperability, supportability, and sufficiency concerns.

Interoperability

The ability of systems, units, or forces to provide data, information, materiel, and services to and accept the same from other systems, units, or forces, and to use the data, information, materiel, and services so exchanged to enable them to operate effectively together.

Information Interoperability *(aka IT and NSS Interoperability)*

The exchange and use of information in any electronic form to enable effective warfighting and combat support operations, within DoD and with external activities such as coalition partners and other federal agencies.

Supportability

The ability of existing and planned IT/NSS systems and infrastructure components to aid, protect, complement, and sustain development or operation of the system being acquired.

Sufficiency

The extent to which requirements are satisfied and the necessary support is available.

Summarize the C4ISP in the Acquisition Strategy

- ***Assess the potential impact of technical, schedule, cost, and funding critical path issues related to interoperability, including those in other programs that will exchange information with the delivered system***
  - *Critical path issues: Issues that could impact the PM's ability to execute the acquisition strategy*
- ***Summarize IT/NSS infrastructure & support considerations identified in the ORD and described in the C4ISP. If infrastructure enhancements are required to support program execution, identify critical path issues for both the acquisition program and the IT/NSS infrastructure***
  - *Describe support shortfalls and issues, and plans to resolve the issues, and provide additional supporting detail in the C4ISP*

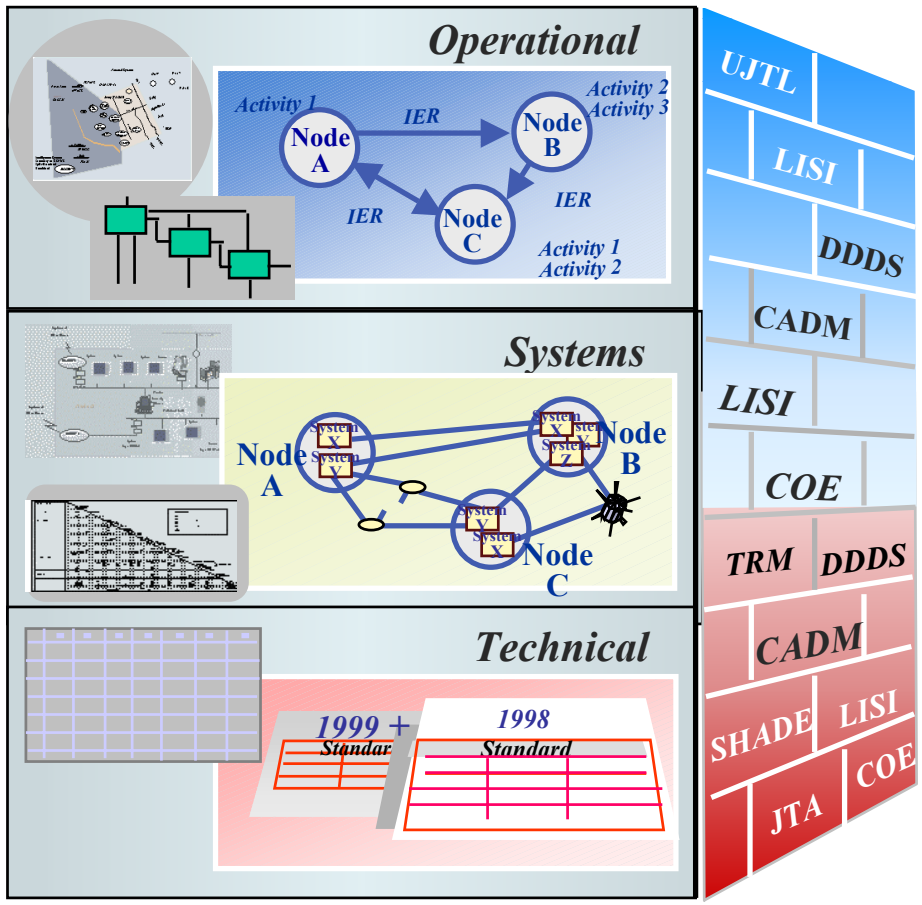
C4ISP Contents

Chapter 1: INTRODUCTION	**Provides an introduction and acquisition status**
Chapter 2: SYSTEM DESCRIPTION	**Identifies high-level information about the system being acquired**
Chapter 3: OPERATIONAL EMPLOYMENT	**Identifies operational and architectural information**
Chapter 4: DERIVED C4I SUPPORT REQUIREMENTS	**Provides analysis and analysis results that identify C4ISR and IT/NSS support requirements**
Chapter 5: POTENTIAL C4I SHORTFALLS & PROPOSED SOLUTIONS	**Identifies shortfalls in available or projected C4I support and interoperability**

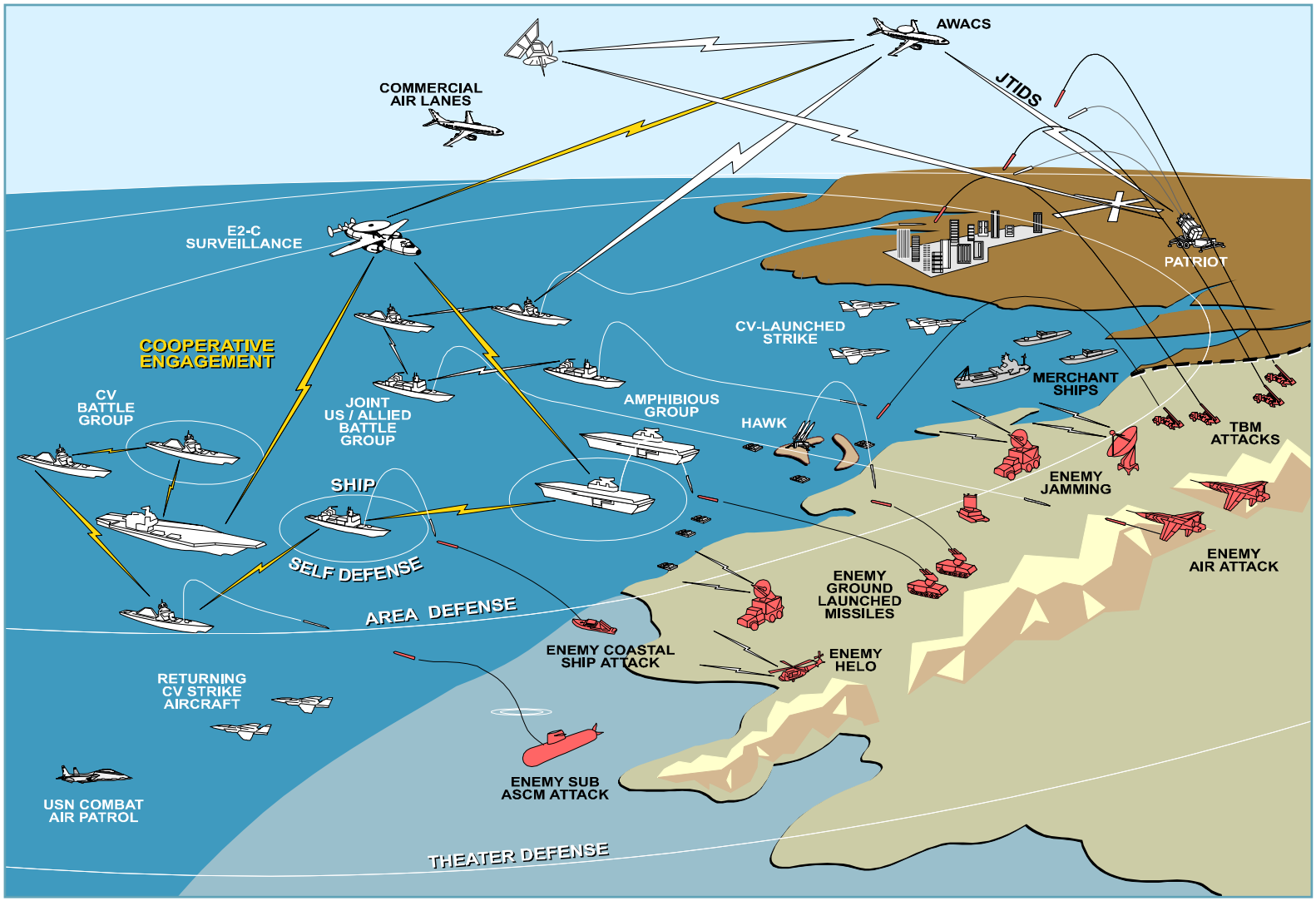
- **Note: Supporting appendices provide amplifying data**

Section 3 C4ISR Architecture Views

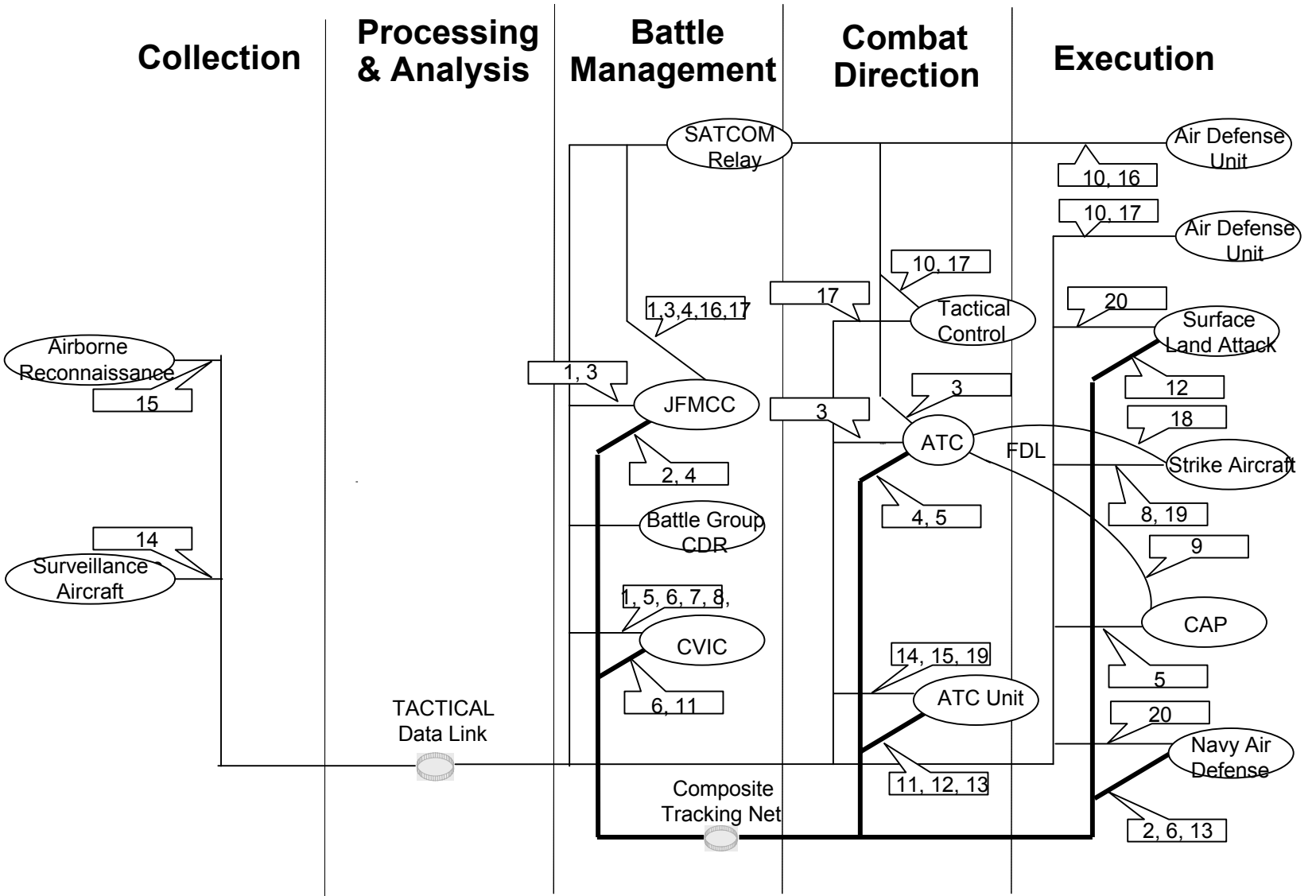
- The *operational architecture view* is a description of the tasks and activities, operational elements, and information flows required to accomplish or support a military operation.
- The *systems architecture view* is a description, including graphics, of systems and interconnections providing for, or supporting, warfighting functions.
- The *technical architecture view* is the minimal set of rules governing the arrangement, interaction, and interdependence of system parts or elements, whose purpose is to ensure that a conformant system satisfies a specified set of requirements.



Notional High-Level Operational Concept Graphic (OV-1)



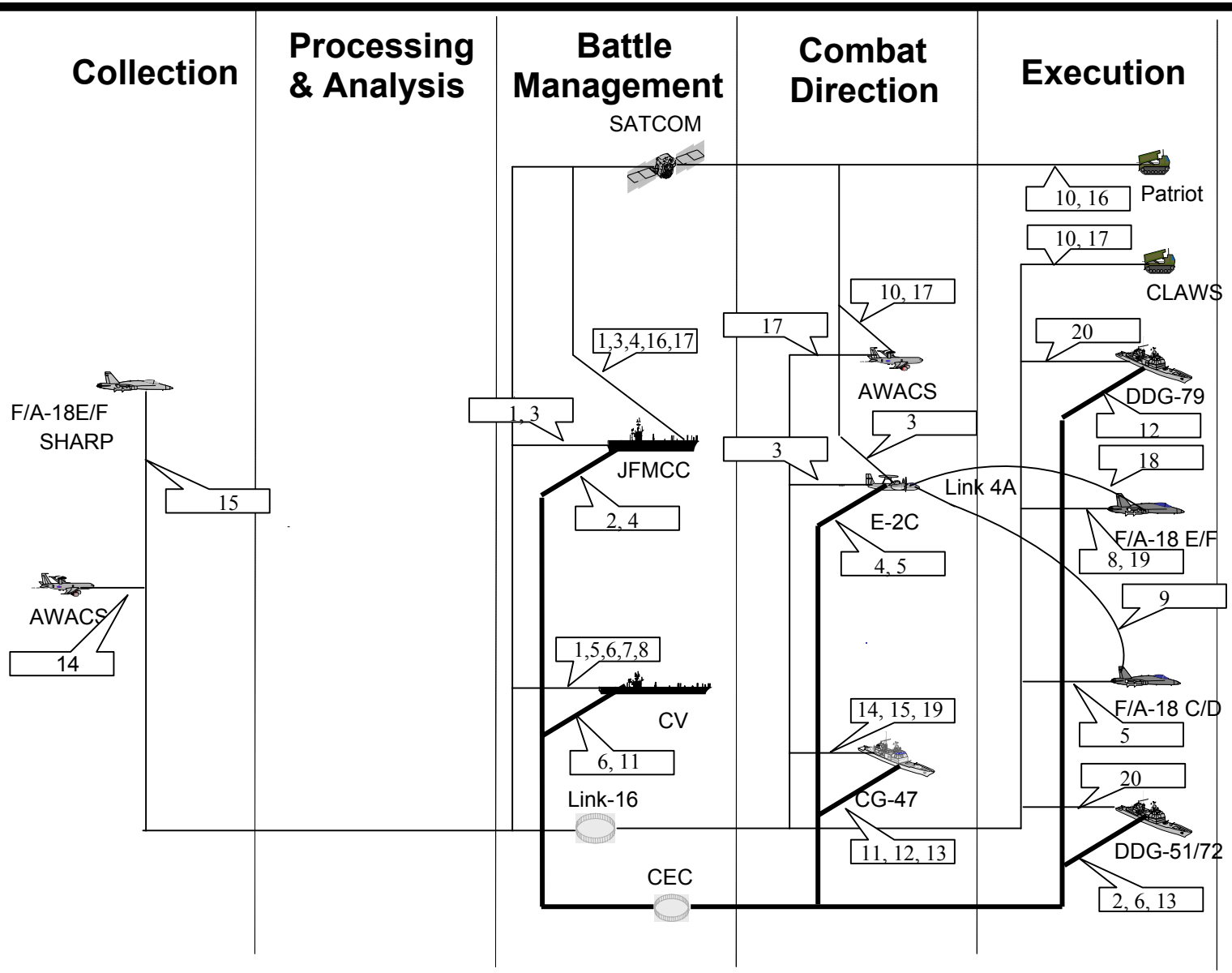
Notional Operational Node Connectivity Description (OV-2)



Notional Operational Information Exchange Matrix (OV-3)

IER No.	Rationale/	Event/Action	Info Char	Sender	Receiver	Crit	Format	TimeInss	Class
1	TI 5.4.6	Target ID	Data	JFMCC	CVIC	Yes	J Series	30 sec	Sec
2	TI 1.1	Track Init.	Sensor	Nav Air De	JFMCC	Yes	CEC data	1 sec	Conf
3	TE 3.4.5	Engage Order	Data	JFMCC	ATC	Yes	J Series	15 sec	Sec
4	TI 1.3	Track Update	Sensor	ATC	JFMCC	Yes	CEC data	7ms	Conf
5	TE 3.4.5	Engage Order	Data	CVIC	CAP	Yes	J Series	10ms	Conf
6	TL 1.5	Target Loc	Sensor	Nav Air De	CVIC	Yes	CEC data	4 sec	Conf
7	TA 5.2	Target Acq	Data	Air Defens	CVIC	Yes	J Series	2 min	Sec
8	TI 6.8.5.7	Target Killed	Data	Strike airc	CVIC	Yes	J Series	3 min	Conf
9	PR 2.6	CAP Posit	Data	ATC	CVIC	Yes	J Series	35 sec	Sec
10	TL 1.5	Target Loc	Data	Air Defens	Tactical Co	Yes	J Series	4 Sec	Conf
11	TL 1.5	Target Loc	Sensor	ATC Unit	CVIC	Yes	J Series	2 sec	Conf
12	TI 5.4.6	Target ID	Sensor	ATC Unit	Surface La	Yes	CEC data	1 sec	Conf
13	PI 4.6	Posit Info	Sensor	Nav Air De	ATC Unit	Yes	CEC data	500 ms	Sec
14	TO 7.9.4.6	Cse Orders	Data	ATC unit	Surveil Acr	Yes	J Series	2 min	Conf
15	TO 7.9.4.6	Cse Orders	Data	ATC unit	Airborne R	Yes	J Series	2 min	Conf
16	TL 1.5	Target Loc	Data	ADA unit	JFMCC	Yes	J Series	4 min	Conf
17	TL 1.5	Target Loc	Data	ADA unit (	JFMCC	Yes	J Series	4 min	Conf
18	TO 7.9.4.6	Cse Orders	Data	ATC	Strike Arcr	Yes	FDL	30 sec	Conf
19	TI 5.4.6	Target ID	Data	Strike airc	ATC Unit	Yes	J Series	30 sec	Conf
20	TI 5.4.6	Target ID	Data	Surface L	Navy Air D	Yes	J Series	30 sec	Conf

Notional System Interface Description (SV-1)



Notional Technical Architecture Profile (TV-1)

IER	Service Area	Service	Standard
	Operating System	Kernel	FIPS Pub 151-1 (POSIX.1)
		Shell and Utilities	IEEE P1003.2
	Software Engineering Services	Programming Languages	FIPS Pub 119 (ADA)
	User Interface	Client Server Operations	FIPS Pub 158 (X-Window System)
		Object Definition and Management	DoD Human Computer Interface Style Guide
		Window Management	FIPS Pub 158 (X-Window System)
		Dialogue Support	Project Standard
	Data Management	Data Management	FIPS Pub 127-2 (SQL)
	Data Interchange	Data Interchange	FIPS Pub 152 (SGML)
		Electronic Data Interchange	FIPS Pub 161 (EDI)
	Graphics	Graphics	FIPS Pub 153 (PHIGS)
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C4ISP Contents (cont)

Chapter 4:
DERIVED C4I SUPPORT REQUIREMENTS

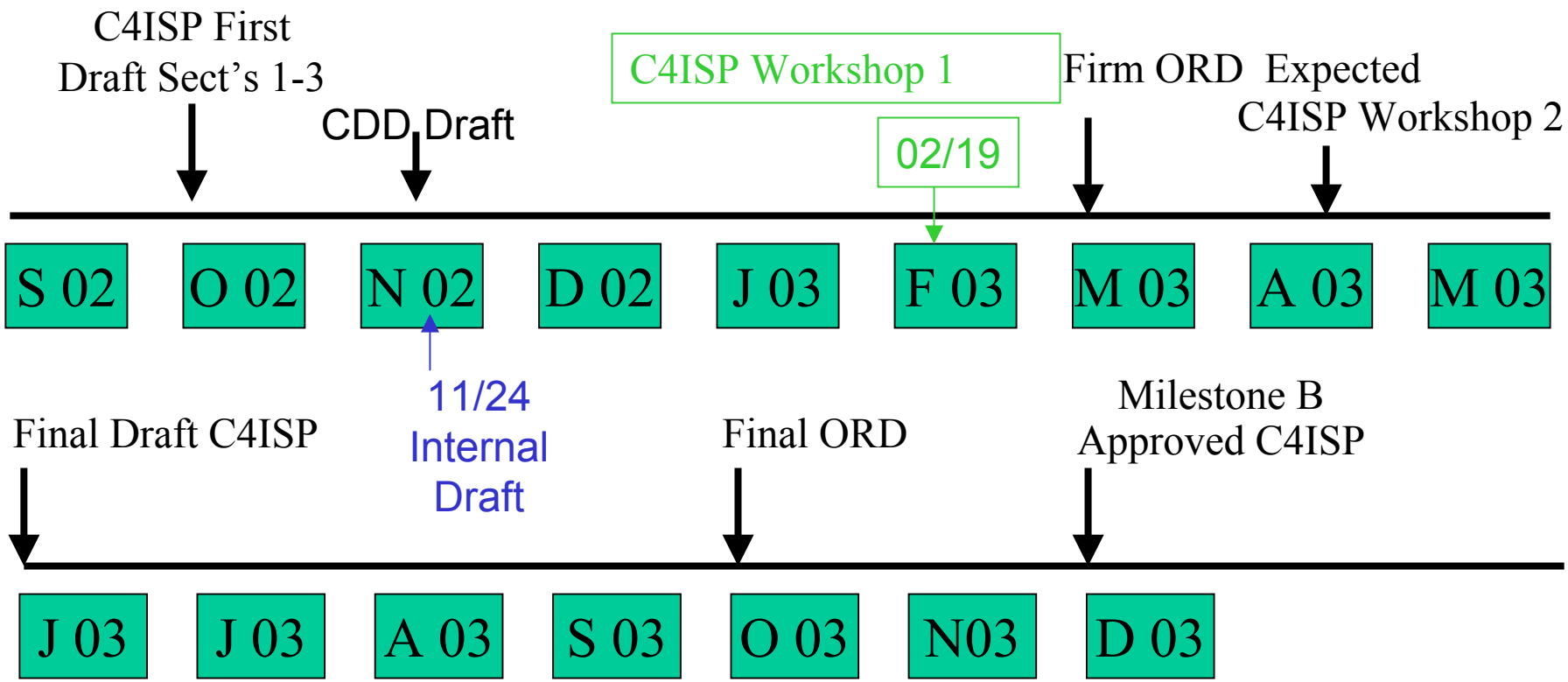
- **A formal analysis of the C4ISR and IT/NSS support needed to satisfy ORD requirements and the CONOPS**
  - **Not merely a re-statement of what is in the ORD**
  - **Requirements for system development as well as system operation**
  - **Support for the system as an information producer, as well as an information consumer**
- **Organize by life-cycle phase, mission area or function, and supporting/interoperating system**

C4ISP Contents (cont)

Chapter 5:
POTENTIAL C4I SHORTFALLS & PROPOSED SOLUTIONS

- **Known/potential shortfalls that may reduce operational effectiveness, or impede development, testing, or training**
  - **Include TBDs that are expected to be resolved later during system acquisition**
  - **Include shortfalls in interfacing systems or information sources**
- **Include:**
  - **Shortfall description and affected systems**
  - **Shortfall impact by life-cycle phase**
  - **Plan and schedule for resolving the shortfall**
  - **Mitigation strategy, pending shortfall resolution**
  - **Organization responsible for shortfall resolution**

BAMS C4ISP Schedule



October 02 thru November 02 :Receive comments on Sect's 1-3

Post revision of Sect's 1-3 on 20 December (Tentative)

October 02 thru January 03: Shortfalls analysis